A New Centipede from the Eastern United States (Chilopoda: Geophilidae)

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Although Chamberlin has described several species of *Brachygeophilus* from the western United States, the following species is the first member of the genus to be taken in the east and is therefore of particular interest.

Brachygeophilus rupestris new species

The present species bears a marked resemblance to the European species *Brachygeophilus truncorum truncorum* (Bergsö and Meinert, 1866) but may be readily distinguished from the latter by the distinct but small clypeal area on the anterior portion of the clypeus; by the four (or three) ventral coxal pores present on each ultimate leg; and by the distinctly longer than wide cephalic plate (61 : 52). In addition, this American species has a total length of 22.2 mm., whereas Brolemann reports that the maximum length of the European species is 18 mm. long.[1]

Type: ♀, Olean, Cattaraugas Co., New York. March 30, 1949. (Walter Kempf, O. F. M.; under a rock along bank of Alleghany River), in author's collection, C–393.

Female. Total length 22.2 mm. *Antennae* pale yellow throughout; absolute length (after clearing in KOH and mounting in balsam) 2.2 mm.; 3.5 times the length of the cephalic plate; 1st article short, subquadrate, wider than subsequent articles, its width to greatest width of next article is 15 : 13; articles 2, 3, 4, and 5 subrectangular; articles 6, 7, 8, and 9 roughly obconical, the rest roughly globular except the last, which is ovate, in distended condition shorter than preceding two articles (20 : 25); most proximal articles sparsely beset with long setae, the following articles becoming gradually more glabrous, these setae proportionately shorter, less strong. *Cephalic plate* yellow, same shade as antennae; longer than wide (61 : 52), widest at mid-length; lateral margins gently convex, anterior margin slightly, angularly bowed forward, the anterior corners angular,

[1] Faune de France, vol. 25, 1932, p. 181.

posterior margin slightly incurved, the posterior corners rounded; dorsal surface areolate except for a solid area on either side and a central area, delineated on all sides by areolated strips of varying width; beset dorsally with long setae, anteriorly one seta immediately behind inner corner of each first antennal article, behind these, a transverse row of seven setae, remainder of setae on the posterior four-fifths of the plate not arranged in such definite rows. *Clypeus* coarsely areolate; wider than long (5:3); clearly delineated by a pale lateral line on either side; immediately behind the anterior clypeal margin behind and between the antennal insertions a definite clypeal area present, this delicately areolate, white, and beset with three small setae arranged in a triangle, the apex posteriorly; immediately in front of and slightly lateral to the clypeal area are two post antennal setae, one at the inner basal angle of each antennal insertion; immediately behind the clypeal area and slightly lateral to it are two widely separated, small setae. *Labrum* dark brown, the three portions, taken together gently bowed forward; central portion beset with six triangular, strong teeth; length of central portion to entire labrum is 1 : 1.6, lateral portions each with two or three obscure, irregular pectinations on medial third. *First maxillae* as in *B. t. truncorum* with four small, weakly chitinized lappets, one on the basal outer margin of each telopodite, one on either outer corner of the syncoxite; each telopodite beset with four setae arranged lengthwise; the syncoxite distinctly areolate, the telopodites less so; telopodites slightly surpassed by syncoxal projections anteriorly. *Second maxillae* with medial syncoxal area coarsely areolate; whitish; narrower than second telopodite article (of second maxillae) (4:6); telopodite with well developed claw, first article with one or two inner setae, the second with two or three, the last with about six, these long, clear, subequal to apical claw. *Prehensors* dark yellow, same shade as rest of head, except claw which is dark brown; areolate; just short of attaining the anterior cephalic margin when closed; tarsus at claw base with slight, pointed denticle, other articles unarmed; ventral and medial surfaces of articles sparsely beset with long, brown setae. *Prosternum* same color as prehensors; areolate; chitin lines

very short, indistinct, barely separated from lateral prosternal sutures; greatest width 1.4 times greatest length.

Tergites light yellow, darkest anteriorly, shading to whitish yellow posteriorly; all tergites and basal plate bisulcate, distinctly so anteriorly, becoming less distinctly so posteriorly; first tergite broadest anteriorly, the sides converging posteriorly; last tergite wider than long (1.6:1); each tergite with two definite transverse rows of six to nine setae, one row paralleling the anterior margin, one the posterior margin; last tergite with eight very long setae, two setae arranged longitudinally on each lateral border, four setae centrally; anterior margin of last tergite straight, the posterior margin semicircular. *Stigmata* first stigma (on second pedal segment) distinctly larger than second stigma, thereafter becoming gradually smaller posteriorly. *Sternites* light yellow; areolate; the first rounded anteriorly; the second to twelfth with a central, transverse, rectangular area raised and separated from anterior and posterior steeply sloping sides by light areolate lines; the anterior sloping sides of sternites 2–10 shallowly excavate to constitute on each a carpophagus structure; sternites 2–12 with a definite, well-chitinized posterior tubercle, these fitting into the split intercalary sternites; all sternites broadly trisulcate, those bearing posterior tubercles most distinctly so, the more posterior sternites shallowly trisulcate; all sternites with two rows of transverse setae, four in each row; ultimate leg sternite trapezoidal, narrowing strongly posteriorly, posterior margin straight, twice as broad as long; terminal pores present; anterior most intercalary sternites distinctly divided medially, posterior ones less distinctly so. *Legs* 37 in number; light yellow; beset with long dark setae arranged in circular rows; claws slightly curved, dark brown; first legs subequal to second in length. Terminal claws of ultimate and penultimate legs equal in size. Ultimate legs beset with long sparse setae. *Ultimate leg coxae* each with four large, ventral pores (the left coxa with a fifth small outer one), arranged in a longitudinal row of three with the fourth, the largest, on the immediate medial side of the second outer pore.

Allotype: ♂, Clifton Forge, Alleghany Co., VIRGINIA, March 6, 1949 (Richard L. Hoffman), in author's collection, C–394.

Male. Total length 7 mm. Essentially the same as the female type but differing in the following characters: *Clypeal area* distinct but containing only two setae, instead of three. *Post clypeal areal setae* just behind clypeal area but not as widely separated as in the type. *Ultimate leg coxal pores* with same arrangement as in the type but only three in number, the outer medial pore not present. *Ultimate legs* as in type beset with long setae, but legs are distinctly more crassate than those of female type. Pairs of legs 39.

Paratype: ♀, Clifton Forge, Alleghany Co., VIRGINIA, March 6, 1949 (Richard L. Hoffman), in author's collection, C–395.

Female. Total length 9 mm. Agrees with the type and with the allotype in bearing a distinct clypeal area and in having the cephalic plate distinctly longer than wide (61 : 53). Agrees with the allotype in having but two setae within the clypeal area and in having the post clypeal areal setae closer together. *Ultimate leg coxae* each with three pores, the fourth medial pore not present. Pairs of legs 39.

Remarks: All measurements of the various portions of the cephalic plate were made after it had been mounted in balsam. In balsam the clypeal area, though still evident, tends to become less distinct, so that it is best seen unmounted. The slight variations in setal arrangement and ultimate leg coxal pore number evidenced in the allotype and paratype from Virginia are probably due to their immaturity, which is evident from their lengths, 7 and 9 mm. as opposed to the length of the type, 22.2 mm.

Current Entomological Literature

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Under the above head it is intended to note papers received at the Academy of Natural Sciences of Philadelphia and the University of Pennsylvania, pertaining to the Entomology of the Americas (North and South), including Arachnida and Myriopoda. Articles irrelevant to American entomology will not be noted; but contributions to anatomy, physiology and embryology of insects, however, whether relating to American or exotic species will be recorded.

This list gives references of the year 1949 unless otherwise noted. Continued papers, with few exceptions, are recorded only at their first installment.

For other records of general literature and for economic literature, see the Bibliography of Agriculture, Washington, and the Review of Applied Entomology, Series A, London. For records of papers on medical entomology see Review of Applied Entomology, Series B.